

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-6 and 8-14 remain in the application. Claim 7 has been cancelled.

In the second paragraph on page 2 of the above-mentioned Office action, claims 1, 2, 5-6, 8, 10-11, and 13 have been rejected as being unpatentable over Fujihira (US Pat. No. 6,097,063) together with Assaderaghi et al. (US Pat. No. 6,121,661) under 35 U.S.C. § 103(a).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

an insulation layer on said semiconductor substrate, said insulating layer having a thickness of between 50 nm and 200 nm;

...

at least one of said first doped terminal zone and said second doped terminal zone directly adjoining said semiconductor substrate. (Emphasis added.)

As disclosed in column 12, line 4 of Fujihira, the SOI component shown in Fig. 6 should have a breakdown voltage of 100 V. SOI components with a breakdown voltage of 100 V, without additional measures, require an insulating layer with a thickness of between 500 nm and 1000 nm, which is well known to a person skilled in the art.

When a person skilled in the art starts from Fujihira having a breakdown voltage of 100 V and an insulating layer with a thickness of between 500 nm and 1000 nm, and tries to improve the heat emission from the semiconductor layer, he or she would learn from Assaderaghi et al. to connect the source and drain zones of the component to the substrate over highly doped semiconductor zones. However, the person skilled in the art would not obtain any hint from Assaderaghi et al. to also reduce the thickness of the insulating layer which is especially configured for high breakdown voltage.

The reason that Assaderaghi et al. only describe a thickness of the insulating layer of 100 nm - 500 nm is that the MOSFETs described therein are pure logic components, which are not configured for high breakdown voltage (100 V or higher).

In summary, it is not obvious for a person skilled in the art, starting from Fujihira, to connect the source and drain zones to the semiconductor substrate and at the same time to reduce the insulating layer thickness to the value as recited in claim 1 of the instant application.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since claims 2, 5-6, 8, 10-11, and 13 are ultimately dependent on claim 1, they are believed to be patentable as well.

Applicants acknowledge the Examiner's statement from the fourth paragraph to the last paragraph on page 5 of the above-mentioned Office action that claims 3-4, 9, 12, and 14 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Since claim 1 is believed to be patentable as discussed above and claims 3-4, 9, 12, and 14 are ultimately dependent on claim 1, they are believed to be patentable in dependent form. A rewrite is therefore believed to be unnecessary at this time.

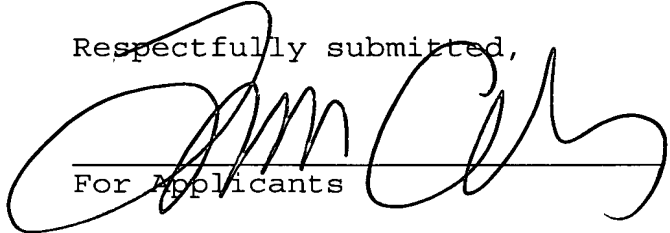
In view of the foregoing, reconsideration and allowance of claims 1-6 and 8-14 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

Petition for extension is herewith made. The extension fee for response within a period of one month pursuant to Section 1.136(a) in the amount of \$110.00 in accordance with Section 1.17 is enclosed herewith.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

  
For Applicants

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October 20, 2003  
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